HydroSeal Monoflex

High Performance Construction Joint Sealing

Revision: 1.0 - 10th March 2022
Code: HS-MF

INTRODUCTION

Newton HydroSeal Monoflex is a high performance joint sealing system for construction, movement and expansion joints. It is particularly suitable in critical areas where irregular, high and/or frequent movement might be expected, as it is able to accommodate the movement whilst maintaining the waterproof seal over the joint.

The system consists of the HydroSeal Monoflex waterproofing tape, manufactured from a flexible polyolefine (FPO) which is installed to the substrate with the suitable Newton HydroSeal Monoflex Adhesive.

KEY BENEFITS

- Waterproofs construction joints that are subject to extreme movement
- Easy and quick to install and repair
- Excellent adhesion to different substrates with HydroSeal Monoflex Adhesive
- Resistant to high water pressure (≥ 4.0 bar)
- Applicable on dry and damp concrete

TYPICAL APPLICATIONS

Sealing of construction joints, movement joints, pipe penetrations, and cracks in all types of below-ground and water-retaining structures, such as:

- Basements
- Tunnels, culverts and hydroelectric plants
- Swimming pools
- Sewage and water treatment plants

SPECIFICATION

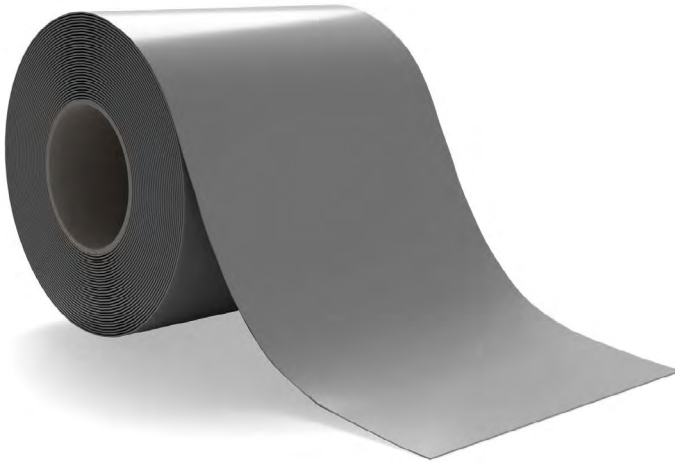
Newton Waterproofing Systems work in partnership with RIBA NBS and NBS Source, which integrates into project workflows, providing all product data from Newton's NBS BIM Objects, NBS Plus Clauses and RIBA Product Selector into one single source of product information.

NBS Source also hosts a large selection of Newton case studies, as well as product literature and certifications. A wide range of drawings are available on our website.

TRAINING AND COMPETENCY OF THE USER

Newton HydroSeal Monoflex should be installed by those with an understanding of the requirement to waterproof retained structures and the knowledge and training to use the product as part of a coordinated approach to the waterproofing of the structure, which in many cases will require further waterproofing products so as to achieve the required habitable grade as defined by BS 8102:2009.

Newton Specialist Contractors (NSBCs) are trained by Newton Waterproofing Systems in the correct specification and installation of Newton waterproofing products and will provide the client with a meaningful insurance backed guarantee for the waterproofing.



PURCHASE CODES

Product	Purchase Code
• HydroSeal Monoflex - 100mm	HS-MF-100
• HydroSeal Monoflex - 200mm	HS-MF-200
• HydroSeal Monoflex Adhesive	HS-MFA

REQUIRED ANCILLARIES

- Newton HydroSeal Monoflex Adhesive - 5 litres - Two component, versatile and solvent-free epoxy adhesive for installing HydroSeal Monoflex over the joint/crack in the substrate. The adhesive is easy to mix and apply on site, and exhibits excellent bond strength even under damp conditions

PACKAGING

Newton HydroSeal Monoflex is supplied in 20m long rolls x widths of either 100mm or 200mm.

Newton HydroSeal Monoflex Adhesive is supplied in two containers with a combined volume of 5 litres.

SPECIALIST TOOLS REQUIRED

No specialist tools needed.

COLOUR

- Grey

HydroSeal Monoflex

High Performance Construction Joint Sealing

TECHNICAL DATA

Performance	HydroSeal Monoflex	Units
Colour	Grey	
Material	Flexible polyolefine	
Width	100 / 200	mm
Length	20	m
Area	2 / 4	m^2
Thickness	1.0	mm
Weight	930	g/m^2
Packaged weight	1.86 / 3.72	kg
Shelf life	12	Months
Resistance to temperature - min/max	-30 to +90	°C

Installed Performance	Result	Units	Test Method
Tear resistance - Lengthwise	15	N/mm^2	DIN EN 12311-2 (Version B)
Tear resistance - Across	15	N/mm^2	DIN EN 12311-2 (Version B)
Elongation at break - Lengthwise	620	%	DIN EN 12311-2 (Version B)
Elongation at break - Across	670	%	DIN EN 12311-2 (Version B)
Tear resistance (nail shank) - Lengthwise	260	N	DIN EN 12310-1
Tear resistance (nail shank) - Across	260	N	DIN EN 12310-1
Water vapour permeability	60	m	DIN EN 1931 (Version B)
UV-Resistance min.	≥ 6500	h	DIN EN ISO 4892-3
Shore A hardness	Approx. 87		
Bonding strength	≥ 4.0*	N/mm^2	DIN EN 1348
Peel test on wood carrier	≥ 100*	N	
Water tightness - 60 kPa/24 Std	Watertight		DIN EN 1928-A
Water tightness - 400 kPa/72 Std	Watertight		DIN EN 1928-B
Burst pressure	≥ 4.0	bar	
Reaction to fire	Class E		DIN ISO 11925-2 EN 13501-1

The above data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary. *Dependent on the adhesive used.

STORAGE

It is essential that goods are kept in the original packaging, keep cool and dry, protect against sunlight.

If packaging film has been opened then apply the material within 2 months.

HEALTH AND SAFETY

Use appropriate PPE for the environment the system is installed within. Use products only as stated within this Data Sheet and the Safety Data Sheet.

APPLICATION

- Use a brush or roller (depending on the substrate) to apply HydroSeal Monoflex Adhesive either side of the joint or crack to be sealed.
- Do not seal the central area immediately next to the joint/crack with adhesive - this section should not be adhered as it is important to allow the HydroSeal Monoflex to stretch with the substrate movement.

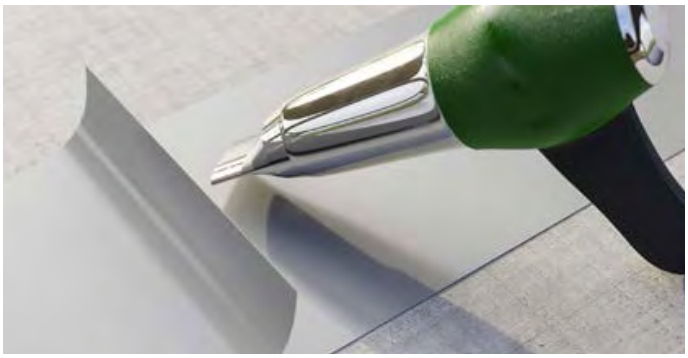
© Newton Waterproofing Systems
Newton House, 17-20 Sovereign Way
Tonbridge, Kent, TN9 1RH

www.newtonwaterproofing.co.uk
tech@newtonwaterproofing.co.uk
+44 (0)1732 360 095

Opening Hours:
Monday to Thursday 8:00am - 5:30pm
Friday 8:00am - 5:00pm

- Lay the HydroSeal Monoflex onto the adhesive and press it in, avoiding creases and wrinkles in the material as much as possible.

- Smooth the HydroSeal Monoflex and push the adhesive outwards from the middle of the joint, maintaining the dry 'stretch zone' in the middle
- For overlaps between the ends of adjoining lengths of HydroSeal Monoflex, ensure that there is a 10cm overlap and roughen the overlapping sections with sandpaper (80 grit).
- Use a hot air blower to weld the overlapping sections together, avoiding any air gaps or bubbles between the sections - press the overlaps together firmly



- If the HydroSeal Monoflex is not to be covered or protected, apply another layer of adhesive on top, leaving an area of 20 - 30mm directly above the joint/ crack free from adhesive

© Newton Waterproofing Systems
Newton House, 17-20 Sovereign Way
Tonbridge, Kent, TN9 1RH

www.newtonwaterproofing.co.uk
tech@newtonwaterproofing.co.uk
+44 (0)1732 360 095

Opening Hours:
Monday to Thursday 8:00am - 5:30pm
Friday 8:00am - 5:00pm

HydroSeal Monoflex

High Performance Construction Joint Sealing

CE 15	JN NEWTON WATERPROOFING	Newton Waterproofing Systems Newton House 17-20 Sovereign Way Tonbridge Kent TN9 1RH	JST-O Monoflex 1mm DIN EN 13967 Synthetic waterproofing membrane cosists of flexible Polyolefine (FPO) according to DIN-EN 13967 for waterproofing of buildings.

Essential characteristics to DIN EN 13967	Performance	Harmonised Technical Specification
Length	-0 m / +0.2 m	DIN EN 13967
Width	± 2 mm	
Thickness (waterproofing membrane)	1 mm ± 0.1 mm	
Straightness	Passed	
Mass per unit area	x = 930 g/m² ± 50 g/m²	
Visible defects	Free of visible defects	
Water tightness - 60kPa / 24h Water tightness - 400kPa / 72h	Passed Passed	
Resistance to impact A: Alu plate Resistance to impact B: EPS panel	≤ 250 mm ≤ 1500 mm	
Durability of water tightness against thermal ageing	Passed	
Durability of water tightness against chemicals	Passed	
Compatibility with bitumen Water tightness	Passed	
Tear resistance (Nail shank)	Longitudinal: ≥ 200 N Lateral: ≥ 200 N	
Shear resistance of the joint seams	≥ 300 N / 50 mm	
Water vapour permeability - SD-Value	g = 6.80·10⁻⁹ kg / (m²·s) ± 30% 60 m ± 20 m	
Resistance to static loads Method A: EPS panel Resistance to static loads Method B: Substrate concrete	≥ 20 kg ≥ 20 kg	
Tensile properties	Longitudinal: ≥ 12.5 N/mm² Lateral: ≥ 12.5 N/mm² Longitudinal: ≥ 500% Lateral: ≥ 500%	
Reaction to fire	Class E	

© Newton Waterproofing Systems
Newton House, 17-20 Sovereign Way
Tonbridge, Kent, TN9 1RH

www.newtonwaterproofing.co.uk
tech@newtonwaterproofing.co.uk
+44 (0)1732 360 095

Opening Hours:
Monday to Thursday 8:00am - 5:30pm
Friday 8:00am - 5:00pm